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(54) COLOR FILTER SUBSTRATE AND LIQUID CRYSTAL DISPLAY ELEMENT

(57) Abstract:

PURPOSE: To improve the adhesive power and fine working characteristic (patterning characteristic) of a conductive film by forming an intermediate film of a metal oxide film obtd. by condensing liquid contg. an org. metallic compd. and specifying the thickness of this intermediate film.

CONSTITUTION: This color filter substrate is constituted of a transparent substrate 1, color filter layers 2, the intermediate film 3 essentially consisting of the metal oxide film and the conductive film 4 subjected to a patterning treatment. The layer consisting essentially of at least one kind among TịÓŹ, ZrO2, AlŽO3 and SiO2 is exemplified as a representative preferable example for the intermediate film 3 provided in order to improve the adhesive power between the conductive film 4 and the color filter layers 2. Others, such as metal oxide, are usable as well. The thickness of the intermediate film 3 is specified to 2 to 80nm, more preferably 10 to

50nm. The adhesive power is not sufficiently improved if the thickness is smaller than 2nm. The internal stress of the intermediate film 3 increases and the effect of improving the adhesive power degrades as well; in addition, there is a possibility of cracking if the thickness is larger than 80nm.

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